

## DESCRIPTION OF THE DRAWINGS

Figs. 1a-3m. Representative front views of frames for gel diaphragm pure volume expansions.

Figs. 4a-5b 3n-5b and 6a-6n Representative sectional view of inflatable restraint gel diaphragm assemblies.

Figs. 5c-5m. Representative sectional view of various gel diaphragms.

Figs. 5n-5t. Representative sectional view of various gel diaphragms with peripheral retainer.

Figs. 5u-5w. Representative sectional view of gel diaphragms with peripheral retainer and expansion control elements.

Figs. 7a-7d. Representation sectional view of expanded gel diaphragms.

Figs. 7e-7h. Representation views of pure gel volume expansion showing various restriction conformations.

Figs. 2a-2e. Representation front views of flange assemblies of expansion frames.

Figs. 8a-8f. Representation sectional view of gel diaphragms showing positions of various expansion films, sheets, and fabric.

Figs. 8g-8n 8l. Representation front views of various films, sheets, thread and fabric patterns, scoring, and cuts.

Figs. 9a-9i. Representation of various gel diaphragm volume expansion configurations.

Fig. 10a. Conventional deployment timing profile of passenger side bag in milliseconds.

Fig. 10b. Deployment timing profile of passenger side volume expansion of gel in milliseconds.

Fig. 10c. Deployment timing profile of driver side volume expansion of gel diaphragm in milliseconds.

Fig. 10d. Deployment profile of driver side volume expansion of gel diaphragm showing enveloping cushion surround conformation on dummy.

Fig. 10e. Deployment profile of passenger side volume expansion of gel diaphragm showing enveloping cushion surround conformation on dummy.

Fig. 11. Typical conventional air bag deployment pressure plot showing positive pressure A, cover break pressure point B, time from negative pressure to positive pressure after cover tearseam break D, maximum air bag pressure E.

Fig. 12. Typical invention gel diaphragm deployment pressure plot showing positive pressure A, cover break pressure point B, time to maximum positive pressure after cover tearseam break E.

Figs. 13-15. Invention gel diaphragms deployment pressure plots showing various selected maximum positive pressure absent tear covers.

Figs. 16, 17a, 17b, 17c, 17d, and 18-23. Illustrates composites of the invention.